

IN THE CLAIMS

Claims 1-15 (canceled)

16. (currently amended) A radio transceiver system for communication of signals occurring in multiple channels in a frequency band, the system comprising:

a radio transceiver that downconverts energy in the frequency band including energy in the multiple channels and produces a baseband receive signal representative thereof, and that upconverts a plurality of transmit signals each to be transmitted in a corresponding one of the multiple channels in the frequency band;

an analog-to-digital converter (ADC) coupled to the radio transceiver that converts the baseband receive signal to a digital receive signal;

a digital-to-analog converter (DAC) coupled to the radio transceiver that converts digital transmit signals to analog transmit signals for upconversion by the radio transceiver; and

a baseband signal processing section coupled to the ADC and to the DAC that baseband demodulates the digital receive signal to recover multiple receive data associated with corresponding channels in the frequency band and that modulates multiple transmit data to produce digital transmit signals for processing by the DAC and transmission by the radio transceiver in corresponding channels in the frequency band, wherein the baseband signal processing section performs baseband modulation according to a communication protocol for each of multiple transmit data for transmission by the radio transceiver in corresponding channels in the frequency band, and performs baseband demodulation according to the communication protocol of the digital receive signal representing receive signals for corresponding channels in the frequency band, to thereby simultaneously support multiple channels in the frequency band of the same communication protocol.

17. (canceled)

18. (currently amended) The system of claim 16 17, wherein the baseband signal processing section performs baseband modulation and baseband demodulation to simultaneously support multiple channels of the same wireless location area network (WLAN) communication protocol technology in the frequency band.

19. (canceled)

20. (new) A method for communication of signals occurring in multiple channels in a frequency band, comprising:

downconverting energy in the frequency band including energy in multiple channels in which multiple signals are transmitted in accordance with the same communication protocol and producing a baseband receive signal representative thereof;

converting the baseband receive signal to a digital receive signal;

demodulating the digital receive signal to recover multiple receive data;

modulating multiple transmit data to produce a plurality of digital transmit signals to be simultaneously transmitted in corresponding channels in the frequency band according to the same communication protocol;

converting the plurality of digital transmit signals to analog transmit signals for upconversion by the radio transceiver; and

upconverting the plurality of analog transmit signals each to be transmitted in a corresponding one of the multiple channels in the frequency band.

21. (new) The method of claim 20, wherein modulating comprises modulating multiple transmit data according to the same wireless local area network (WLAN) communication protocol, and demodulating comprises demodulating the digital receive signal according the WLAN communication protocol.